PYCHESIGO (12-09)
Approved for use through 11/30/2005. OMB 6681-0535
U.S. Palent and Tradement Office; U.S. DEPARTMENT OF COMMERCE

		PPLICATIONS		
I hereby appoint:				
x Precitioners	sesociated with the Customer Number:	45979	7	
OR		L		
Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):				
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	nt(a) to represent the undersigned before the United St plications sesigned <u>only</u> to the undersigned according	to the USPTO analyzment	records at shown on the Statements	
Under 87 CFR 3:73(b)	) strached.			
Assignee Name a				
Microsoft Co	rporation			
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A copy of this fo	nns, together with a statement under 37 C	FR 3.73(b) (Form F	TO/SB/96 or equivalent) is	
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PTO-State (0.1-08)
Approved for use through 04:00/1006, OMB 6054-0301
U.S. Polent and Tackenank Office, U.S. OFFARTHEIT IN U.S. Polent and Tackenank Office, U.S. OFFARTHEIT IN U.S. Polent and Tackenank Office, U.S. OFFARTHEIT IN U.S. OR 6054-0301
Under the Papernork Reduction Act of 1996, no persons are required to respond to a collection of infimultion unitset, infigurity as until CMS control number. STATEMENT UNDER 37 CFR 3.73(b) Applicant/Patent Owner: Wang et al. Application No./Patent No.: 7,263,224 Filed/Issue Date: August 28, 2007 Entitled: STROKES LOCALIZATION BY M-ARRAY DECODING AND FAST IMAGE MATCHING Corporation Microsoft Corporation , a COPPOFatuori
(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.) (Name of Assignee) states that it is: x the assignee of the entire right, title, and interest; or an assignee of less than the entire right, title and interest. (The extent (by percentage) of its ownership interest is \_\_\_\_\_\_\_%) in the patent application/patent identified above by virtue of either: X An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_015289\_\_\_\_\_, Frame \_\_\_\_0354 \_\_\_ , or for which a copy thereof is attached. OR B. A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows: 1. From: The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_ , Frame \_\_\_\_\_ , or for which a copy thereof is attached. To: The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached. 3 From: The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_\_, Frame \_\_\_\_\_\_, or for which a copy thereof is attached. Additional documents in the chain of title are listed on a supplemental sheet. x As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11. [NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.081 The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee. 6.2-08 Maurice J. Pino (206) 359-8000 Telephone Number Printed or Typed Name

Attorney for Assignee Title

Form PTO-1595 RP ORDATION FORM	U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office	
(Rev. 10/02) OMB No. 0651-0027 (exp. 6/30/2005) PATENTS ONLY		
Tab settings ⇔⇔⇔ ▼ ▼	<b>* * *</b>	
	Please Record the attached original documents or copy thereof.	
Name of conveying party(ies):     Jian Wang     Yngnong Dang     Clang Wang     Liyong Chen     Xlaoxu Ma  Additional name of conveying party(ies) attached? ☐ Yes ☒ No	Name and address of receiving party(les)     Name: Microsoft Corporation     Internal Address:	
3. Nature of conveyance:  Assignment Merger  Security Agreement Change of Name  Other  Execution Date: January 14, 2004 and January 15, 2004 and February 12, 2004	Street Address: One Microsoft Way  City: Redmond State: WA Zip: 98052  Additional Name(s) & address(es) attached?  Yes No	
4. Application number(s) or patent number(s):  If this document is being filed together with a new application, the execution date of the application is:  A. Patent Application No.(s)  10/759,357  Additional numbers attached?  Yes No		
Name and address of party to whom correspondence concerning this document should be mailed:	6. Total number of applications and patents involved: 1	
Name: Kenneth F. Smolik Internal Address: Banner & Witcoff. Ltd.	7. Total fee (37 CFR 3.41) \$ 40.00  Enclosed  Authorized to be charged to deposit account	
Street Address: 10 South Wacker Drive	8. Deposit account number: 19-0733	
City: Chicago State: iL Zip: 60606	(Attach duplicate copy of this page if paying by deposit account)	
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# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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invent	orship	Microsoft Corporation
Appuc	ney's Docket No	003797.00627
Attorn	ocket No.	MS# 305971.01
MS Do	ocket No	PROPERTY AND PACT DAAGE
Title:	STROKES LOCALIZATION BY m-ARRAY	DECODING AND LAST IMAGE
	MATCHING	

# PATENT ASSIGNMENT

# PARTIES TO THE ASSIGNMENT Assignor(s):

Jian Wang

Microsoft Research Asia 5F, Beijing Sigma Center No. 49, Zhichun Road, Haidian District Beijing 100083, P.R. China

Yingnong Dang Microsoft Research Asia 55f, Beijing Sigma Center No. 49, Zhichun Road, Haidian District Beijing 100080, P.R. China

Qiang Wang Microsoft Research Asia 5F, Beijing Sigma Center No. 49, Zhichun Road, Haidian District Beijing 100080, P.R. China

Liyong Chen Microsoft Research Asia 5F, Beijing Sigma Center No. 49, Zhichun Road, Haidian District Beijing 100080, P.R. China

Xiaoxu Ma 550 Memorial Drive, Apt. 15D1 Cambridge, MA 02139

#### Assignee:

Microsoft Corporation Corporation in the State of Washington One Microsoft Way Redmond, WA 98052

#### AGREEMENT

WHEREAS, ASSIGNOR(S) (listed above) are inventor(s) of an invention entitled "STROKES LOCALIZATION BY m-ARRAY DECODING AND FAST IMAGE MATCHING," as described and claimed in the specification forming part of an application for United States letters patent referenced above, which application was executed by said assignor(s) on the same date appearing next to the signature of said assignor(s) appearing below;

WHEREAS, Microsoft Corporation (hereinafter referred to as ASSIGNEE), a corporation of the State of Washington having a place of business at One Microsoft Way, Redmond, WA 98052, is desirous of acquiring the entire right, title and interest in and to the invention and in and to any letters patent that may be granted therefore in the United States and in any and all foreign countries:

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S) hereby sell, assign and transfer unto ASSIGNEE, the entire right, title and interest in and to said invention, said application and any and all letters patent which may be granted for said invention in the United States of America and its territorial possessions and in any and all foreign countries, and in any and all divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States application to which said foreign applications are entitled by virtue of international convention, treaty or otherwise, said invention, application and all letters patent on said invention to be held and enjoyed by ASSIGNEE and its successors and assigns for their use and benefit and of their successors and assigns as fully and entirely as the same would have been held and enjoyed by ASSIGNOR(S) had this assignment, transfer and sale not been made. ASSIGNOR(S) hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR(S) agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding said letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

2004/2/12 Date:	Jan Wang
Date:	Jian Wang
Date	Yingnong Dang
Date	Qiang Wang
Date	Liyong Chen
Date	Хівохи Ма

## AGREEMENT

WHEREAS, ASSIGNOR(5) (listed above) are inventor(s) of an invention entitled "STROKES LOCALIZATION BY m-ARRAY DECODING AND FAST IMAGE MATCHING," as described and claimed in the specification forming part of an application for United States letters patent referenced above, which application was executed by said assignor(s) on the same date appearing next to the signature of said assignor(s) appearing below;

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Date:	Jian Wang
Date:  Jan 15, 2004  Date	Dang Yingmong
Date	Yingnong Dang
Jan 15, 2004	(Vane Wang
Date	Qiang Wang
Tan 15. 2004	Linguez Chen
Jan 15. 2004 Date	Liyong Chen
Date	Xiaoxu Ma

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Date:	Jian Wang
Date	Yingmong Dang
Date	Qiang Wang
Date	Liyong Chen
Date	Xiaoxu Ma